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CLINICAL DIAGNOSTIC ASPECTS OF THE TRAUMATIC BRAIN INJURY

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Introduction. Traumatic brain injury (TBI) and its consequences has great medical and social importance, due to its significant role in the structure of morbidity, mortality and disability population. Particular issue is devoted to the extraordinary number of scientific papers, but this issue remains a number of unresolved aspects. Neurological manifestations of the individual effects of combined TBI do not lose their position on the frequency and prevalence among other diseases. Despite the diversity of current research and literature data, search pathogenic mechanisms that lead to neuropsychological impairment in this disease has not yet led to any definitive conclusions.

Aim. Diagnostic features studying in patients after traumatic brain injury.

Materials and methods. We observed 160 patients in the age from 18 to 40 years, after traumatic brain injury (TBI), which were treated at the Kharkiv emergency unit hospital named by prof. A.I. Meschaninov. Also there were inspected 40 almost healthy people. For all patients were used clinical-neurological, neuro-physiological (EEG, EP), neuropsychological (MoCA, 10 words memorization, Shulte's tables) investigations, MRT of the brain, immunofermental analysis for BDNF and S100 studying. All data were statistically processed.

Results. In the acute period patients complained on headache (91,6%), vertigo (35,4%), general weakness (83,3%), worsening in memory (87,4%), in attention (75,0%); reduction in sight (77,1%), rumor (64,6%), convulsive assaults (37,5%), apathy and sleepiness (22,9%). Accordantly to the neuropsychological investigation, were founded reduces of number of words for 10 words test memorizing (in comparison with control group), the lower total volume of reproduction ($p < 0,05$), increasing time for working by Shulte's tables, more amount mistakes. Studying BDNF in the blood serum has shown, that in the acute period, the changes are not such significant, as in distant. But not the same fact was observed by studying S100. It was shown, that S100 in the acute period of combined TBI increases more than twice in comparison with the control group. All changes correlated with complaints and neurological symptoms.

Conclusions: Even mild traumatic brain injury occurs the disturbance of neuropsychological indices and its' biochemical markers. This changes is necessary to take into account providing the treatment tactics in combined TBI patients.